

ABSTRACT OF THE DISCLOSURE

A virtual file system and method. The system architecture enables a plurality of underlying file systems running on various file servers to be "virtualized" into one or more "virtual volumes" that appear as a local file system to clients that access the virtual volumes. The system also enables the storage spaces of the underlying file systems to be aggregated into a single virtual storage space, which can be dynamically scaled by adding or removing file servers without taking any of the file systems offline and in a manner transparent to the clients. This functionality is enabled through a software "virtualization" filter on the client that intercepts file system requests and a virtual file system driver on each file server. The system also provides for load balancing file accesses by distributing files across the various file servers in the system, through migration of data files between servers.